Water Marketing and Efficiency Grants
City of Fresno Residential Water Meters Installation

1. Executive Summary

Date: May 22, 2009 **Applicant**: City of Fresno Water Division
Address: 2600 Fresno Street 3rd Floor, Fresno California 93721

The City of Fresno (Fresno) needs to install 110,000 residential water meters to comply with California Assembly Bill 514, which requires that all users of federal Central Valley Project (CVP) water install water meters and bill for water usage at a metered rate by 2013. Under the terms of the CVP contract renewal with the United States Bureau of Reclamation, the City must begin charging a metered rate to all users that have water meters installed, starting in January 2010, and all services must be metered by January 2013.

Fresno's residential water meter installation falls under Task D – Measuring Devices. The project will be instrumental in conserving water as it is proven that consumers conserve water when they are paying for it. Leaks will be detected and when repaired, they will reduce the amount of non revenue water. Fresno is a water retailer and supplies approximately 165,798 acre-feet of potable water to 130,167 water services. This proposed project will save the City up to 13,000 acre-feet of water yearly. In addition, the City will improve its water management system through measurement automation and the collection of data. This information will be used for improved planning and customer services. Installation of the 110,000 meters will be completed by January 2013, however the City commits to use the $5,000,000 from the USBR to install 7,052 residential water meters by September 30, 2010. This funding opportunity will create 50 jobs.

2. Background Data

City	Mileage
Sacramento	164
San Francisco	196
Los Angeles	214
Reno	298
San Diego	343
Las Vegas	392

The City of Fresno is located in the Central San Joaquin Valley of California and is the fifth largest city in the State of California. Although the main source of water supply is ground water, Fresno holds entitlements to surface water from Millerton Lake which is served by the Friant Division of the Central Valley Project. Millerton Lake is formed by the Friant Dam which is located on the San Joaquin River about 25 miles northeast of Fresno. It controls the San Joaquin river flow, provides downstream releases, provides flood control, conservation storage, diversion into Madera and Friant-Kern canals, prevents salt water from destroying thousands of acres in the Sacramento-San Joaquin Delta, and delivers water to over a million acres of agricultural land in Fresno and other San Joaquin Valley counties. See Exhibit 1 Project map.

The City of Fresno has approximately 130,167 water service connections. 83% of these connections are single-family residential, which are currently unmetered. The remaining 17% of the connections are multi-family residential, commercial/institutional, industrial, landscape irrigation, and fire service connections.

According to the City's 2008 Water Urban Management Plan, the water demand was reported at approximately 300 gallons per capita per day (gpcd), and the City's intention is to decrease the overall per capita water use by 2 percent per year for five years for a total reduction of 10 percent by 2013 to approximately 270 gpcd. On February 27, 2009, Governor Arnold Schwarzenegger proclaimed a state of emergency based on the third consecutive year of drought in California. The City has joined in the Governor's conservation target of 20%.

Working Relationships with Reclamation

The City of Fresno is a Class 1 Central Valley Project (CVP) water contractor. The City contracted with United States Bureau of Reclamation (USBR) for 60,000 acre-feet of water per year from the Friant Division (Millerton Lake). This supply is conveyed to the City via Fresno Irrigation District (FID) canals. In 1976, the City signed a contract with the FID for delivery of surface water supplies from the Kings River based on the City's pro rata share of FID's water entitlements. The City's CVP contract was renewed in March 2005 for a term of 40 years.

3. Technical Project Description

Work Detail and Approach

There are approximately 110,000 residential water services that must be metered by January 2013, at a cost of $78,000,000. The City is seeking $5,000,000 from the Bureau of Reclamation to leverage the installation of 7,052 residential water meters between October 2009 and September 2010.

The project is designed to develop and implement the installation of the City's residential water meters in four parts. Each part will contribute to the implementation of an effective and economical residential metering program. It will allow the City to meet its deadline and will provide for more local participation. Here is an outline of the work detail:

Part 1. Design and Construction Document:
The design and construction document including the design criteria, the drawings and specification for acquisition of various metering components and construction of the metering program has been completed. See Exhibit 2.

Part 2. Construction of Water Meter Boxes:
Bidding of the water meter boxes has been completed and awarded as of April 23, 2009. This part was divided into 3 supplemental projects and bid out to 3 different contractors. Each contractor will construct 20,000 water meter boxes within the next six months and based on their performance, their contract can be extended to complete the other water meter boxes in increment of 20,000 each. This method of contracting was done for the purpose of helping the City to meet the January 2013 final deadline and also to allow more local participation by reducing the bonding requirements.

Part 3. Contracts to Purchase Water Meter and AMR:
This phase consists of bidding and contracting on competitive installation and acquisition specifications for the residential metering program. It includes the purchase of AMR components, collectors, automatic reader equipment and the installation of the water meter register.

Part 4. Installation of Water Meter
During phase 4, residential meters will be installed throughout the City. This phase is scheduled to begin in September 2009.

The passage of California Assembly Bill 514 includes specific language that requires all users of federal Central Valley Project water install water meters and bill for water usage at a metered rate by 2013. Additionally, under the terms of the CVP contract renewal with the United States Bureau of Reclamation, the City must begin charging a metered rate to all users that have water meters installed, starting in January 2010, and all services must be metered by January 2013. The estimated cost to install each water meter is $709 which includes: Location of the curb stops; excavation of the pits and plumbing the customer's lead line to make room for the meter; installation of the water meter box complete and in place including all pipe, fittings, meter box, and pit resurfacing; flushing and clearing the lead line of debris, and installation of the meter. All work areas will be returned to their original condition and all installations will comply with the revised City of Fresno Standard Drawings W-1A and W-2A. See Exhibit 2

Project Schedule

Milestones	Estimated Date
Award Construction Management Contract	9/16/08
Meter Vendor Pre Proposal	12/16/08
Field Demonstration Set Up and AMR System Vendor Presentations Completed	3/2/09
Field Demonstration Conducted	3/2/09 to 3/20/09
Field Demonstration Results Determined.	3/27/09
Bid Prime Contractor for Water Meter Installed Project	8/09

Contract Awarded and Notice to Proceed Issued	9/09
Construction of Water Meter Installation Contract	9/09
Installation of proposed 6,729 meters funded by the Bureau	9/30/10

Engineering plans
The plans and drawings of the meter pits and vaults are completed and attached as Exhibits 2.

Mechanism by which the project will conserve water
The installation of meters will be instrumental in conserving water. It is proven that consumers will conserve water when they are paying for it. Fresno has been charging a flat rate to residential consumers and so accurate water consumption is not accounted for. The installation of the meters and volumetric pricing will provide an incentive for water conservation.

Improvement of sustainable water supplies
This installation of the residential water meters will improve sustainable water supplies by conserving approximately 10 percent of water used. It will reduce projected water demands and the need for additional future supplies.
The installation of residential water meters will conserve water by encouraging consumers to reduce the amount of water they use by installing technologies such as low-flow shower heads and low-flush toilets. It will bolster water efficiency by focusing on the reduction of waste. Consumers will be encouraged to reduce waste by fixing leaks in their homes, using full loads for washing and dishwashing machines, and making better choices of plants for their landscape.

Sources and support for non-Federal funding
The City has submitted pre-application to California Department of Public Health for stimulus funding to assist with the project. To date, we have not received an invitation letter from them to apply for funding. Additional source of the non-federal funding will be from water revenue bond proceeds and the debt service expenditures for paying this debt back will be funded through the City's Water Enterprise Fund.

a. <u>Recovery Act-Specific Criteria</u>

Subcriteria No. 1:
The bid for prime contract for the residential water meter is scheduled for August, 2009, and the construction of water meter installation contract is scheduled to begin in September 2009.

Subcriteria No. 2:
The City will expend the $5,000,000 by September 30, 2010.

b. Conservation, Efficiency, Markets

Subcriteria No. 1:

Water Marketing or Banking

1. The City of Fresno currently uses 165,000 acre feet of groundwater and treated surface water to meet its demands. The surface water is available from Fresno Irrigation District (FID), the United States Bureau of Reclamation, and the City's Waste Water Recycle Exchange Agreement with FID. The ground water is available from the Kings Sub-Basin, which is part of the greater San Joaquin Valley Groundwater Basin.

2. The City of Fresno is a water retailer and will market this water to its existing residential, commercial and industrial users. The installation of the water meters will make more efficient use of this existing water supply by promoting water conservation. The City will use the installation of water meters to change the way consumers use water. By being charged for actual usage, consumers will be encouraged to use water wisely. The change from flat rate to volumetric rate is being implemented as a result of the passage of California Assembly Bill 514 which requires that all users of federal Central Valley Project water install water meters and bill individual consumers for water usage at a metered rate by January 2013.

3. The City of Fresno has approximately 130,167 water service connections. 83% of these connections are single-family residential and the remaining 17% are multi-family residential, commercial/institutional, industrial, landscape and fire service connections.

4. The City is mandated by Assembly Bill 514 to install water meters on all water services and charge a metered rate to all customers by 2013. AB 514 requires "urban water suppliers" who receive water from the federal CVP under a water service contract, install water meters on all service connections to "residential and non-agricultural commercial buildings" in their service areas on or before January 1, 2013. those urban water suppliers who fail to install water meters are at risk of losing their federal water supply.

Subcriteria No. 2

Water Conservation and Efficiency Improvement

Fresno currently uses 165,000 acre feet of groundwater and treated surface water to meet its demands. It will conserve 16,500 acre feet of water annually with the installation of the residential water meters. Consumers will be encouraged to reduce the amount of water they use by installing technologies such as low-flow shower heads and low-flush toilets. Water efficiency will be bolstered by focusing on the reduction of waste. Consumers will be encouraged to reduce waste by fixing leaks in their homes, using full

loads for washing and dishwashing machines, and making better choices of plants for their landscape.

The surface water is available from Fresno Irrigation District, the United States Bureau of Reclamation, and the City's Waste Water Recycle Exchange Agreement with FID. The ground water is available from the Kings Sub-Basin, which is part of the greater San Joaquin Valley Groundwater Basin. By January 2013 when meters are installed on all residential customers and they are billed on a volumetric system, the City will save approximately 16,500 Acre Feet of water on average each year.
The calculation is based on a 10% reduction of water use due to the change from flat rate to metered rate and the detection and repair of leaks. The existing transport loss is 4 percent lost through leakage and 6 percent lost through fire flows and flushing for a total of 10 percent.

Subcriteria No. 3:

Improvement through measurement, automation
The installation of residential meters with Automatic Meter Reading technology will improve the City's water management through measurement automation. This includes efficient use of labor since automated meter reading will require less man hours. It will increase and improve customer service by giving the City the option to move to a monthly billing cycle. It will also increase customer communication via up-to-date internet information and/or in-home information and provide accurate and efficient data that the City will be able to collect on a more frequent basis. The City will be able to use this additional data and information for a variety of purposes such as planning, customer service, conservation, rate development, and design for infrastructure construction. . It will allow the City to detect water leaks and other waste and is anticipated to reduce 10% of total water use for about 16,500 acre/feet per year.

Subcriteria No. 4:

Reasonableness of cost for the benefits gained.
The cost of this project is $78,000,000 to install 110,000 residential water meters. The estimated amount of water conserved was calculated as follows: Fresno total water usage is 165,000 acre feet each year for 110,000 water users. 165,000 divided by 110,000 water users = 1.5 acre feet per user. This project will provide 110,000 water meters for a cost of $78,000,000. The meters have a life expectancy of 20 years or more. Therefore, this project will have a cost benefit ratio of $20.

$$\frac{\$78,000,000}{16,500 \times 20} = \$236$$

Expected life of the improvement in number of years
The meter system has an expected life and warranty of 20 years.

c. Sustainable Water Supplies and Collaboration

Subcriteria No. 1:

Sustainable Water Supplies for the 21st Century.

1. Will the project make water available to address a specific concern

The residential meter installation project is a widespread conservation program that will be used as a measure to secure permanent water conservation practices and services. It will offset the groundwater usage and reduce the need to overdraft.

On June 5, 2008, Governor Arnold Schwarzenegger declared a statewide drought in California. After experiencing two years of below normal precipitation, the snow levels in the Sierra Nevada are below average and the forecasters are predicting another dry year. According to California Department of Water Resources, "Climate change is already impacting California's water resources. Warmer temperatures, different system of precipitation and run off, and rising sea levels will profoundly affect the ability to manage water supply and other natural resources." [1]

By conserving 10% of its water supply, the City of Fresno will improve the way water is used, enhance the supply and benefit the environment by making more water available in its basin.

2. **Where will the conserved water go**

The water saved by this project will be used to increase water reliability, it will maintain current water supply without the need to develop additional facilities and it will serve the new population growth.

3. Identify any issues that affect the development of a sustainable water supply

The two main issues affecting the development of a sustainable water supply in Fresno are 1: The insufficiency of surface water supplies in the Kings Basin which has been operating under overdraft conditions for many years. The result is a significant decline in the groundwater levels. 2: Fresno is one of the fastest growing cities in the State of California, according to California Department of Finance. This urban growth puts additional pressure on the demand for water causing more groundwater overdraft. This conserved water will help to eliminate groundwater overdraft while sustaining the water demands for current and future development.

Subcriteria No. 2:

Describe collaboration and stakeholder involvement

1. Collaboration and Stakeholders Involvement

The residential meter installation project will benefit the City of Fresno and the entire Central San Joaquin Region using water from the Central Valley Project. By conserving water, the region will benefit from reliable and sustainable water source.

[1] California Department of Water Resources www.water.ca.gov/drought - viewed 01/02/2009

The City of Fresno participated in the Upper Kings Basin Water Forum and is a participant in the Integrated Regional Water Management Plan. The City of Fresno established a Utility Commission for the purpose of determining a 5-year plan for its five enterprise utilities, including water and wastewater. Part of the mission to the commission was to develop, implement and complete a community outreach and education plan that included a five-year rate plan. The Commission's recommendations were to be evaluated according to certain principles including the Completion of required water meter installation by 2013.

2. Identify any non-Reclamation funding partners

The source of the non-federal funding will be from water revenue bond proceeds. The debt service expenditures for paying this debt back is funded in the Water Enterprise Fund. Applications have been submitted through the Upper Kings Basin Water Forum to the Department of Water Resources, but there is no commitment at this time for funding. Also, pre-applications for funding have been submitted to the California Department of Public Health for American Recovery and Reinvestment Act (ARRA), bur as of this writing, we have not been invited to submit a full application.

3. Include letters of support with the application

Letters of support from the City of Clovis, Fresno County, Fresno Metropolitan Flood Control, and Fresno Irrigation District are included as Exhibit 6.

Subcriteria No. 3:

Connections to Reclamation Basin project activities

The City receives 60,000 acre-feet of No.1 quality water annually through its CVP contract and approximately 111,000 acre-feet of high quality water annually through a contract with the Fresno Irrigation District. Water is delivered to a ponding basin for recharging the groundwater supply, and also to the City's Surface Water Treatment Facility to treat and deliver water to customers.

d. <u>Demonstrated Results</u>

Subcriteria No. 1:

Planning Efforts that provide support for the proposed project

The City of Fresno certifies that it has both a Water Conservation Plan and a geographic area drought contingency plan in Place. A copy of the resolution adopting the Urban Water Management Plan containing the Water Contingency plan is attached as Exhibit 3.

1. The City of Fresno adopted its Urban Water Management Plan on August 19, 2008 in compliance with the California Urban Water Management Planning Act which requires every urban water supplier in California providing water for municipal purposes either directly or indirectly to more than 3,000 customers, or supplying more than 3000 acre-feet of water annually to prepare and adopt an Urban Water Management Plan.

During the preparation of the plan, the City coordinated with other agencies such as Fresno county, the Fresno Irrigation District, and other water purveyors in the Fresno area, including the Bakman Water District, Pinedale Water District, Herndon Water Company and others. The Plan was also available for public viewing and public hearing. The Plan includes a City of Fresno Water Conservation Plan and a Water Shortage Contingency Plan describing the installation of the residential water meters.

2 The City of Fresno commissioned a Residential Meter Implementation Plan and an Initial Study/Negative Declaration to address the potential environmental effects of the implementation of the project. The report provides key findings, conclusions and recommendations related to the residential metering plan. The City of Fresno has developed bid specifications and design plans for the proposed projects. The design plans are attached as Exhibit 2.

3. The City of Fresno also took the lead in a multi-agency effort to develop the Fresno Metropolitan Water Resources Plan for the Fresno/Clovis Metropolitan Area. The purpose of the plan was to provide a water supply to accommodate future growth and land-use decisions through 2050. The plan was adopted by Fresno City Council in 1996 and called for a conjunctive use program, combining ground water, treated surface water, artificial recharge and an enhanced water conservation program.

Subcriteria No. 2:

Performance measures
The City will use the extracted data from the reading of the meter to quantify the actual amount of water consumed after the installation of the meter and to compare that data with the amount of water that was consumed before the installation of the meters. They will also be able to tell the difference of the new meter rate compared to the rate prior to the meters being installed. This information will allow the City to quantify the amount of water that is conserved as a result of the installation of the residential water meters.

Subcriteria No. 3:

How estimates of the benefit are made
The estimates are made on the assumption that the installation of water meters will improve the efficiency of water use and water saved by the customer's desire to conserve and to save money. The City will use data collected from the installed meters and compare them to existing data to calculate the difference in water consumed and water saved.

e. Project Financing and Cost Sharing

Subcriteria No. 1:

Demonstrate the financial ability to pay for the estimated project

a. Identify all sources of non-reclamation funding included in the application.

The source of the non-reclamation funding will be from water revenue bonds proceeds. The debt service expenditures for paying back this debt, is funded in the Water Enterprise Fund. See Exhibit 4.

b. Describe any documentation supporting the funding plan that demonstrates the cost-share funds are available (operating budget, financial analysis or report, loan commitment or letter of credit, or other document)

The source of the non-federal funding will be from water revenue bond proceeds. The debt service expenditures for paying this debt back is funded in the Water Enterprise Fund. See Exhibit 4.

c. Estimate any change in O&M costs (increase or decrease) as a result of the proposed work, and describe how any increase in such costs will be paid

The installation and reading of residential meters has not been previously done by the City, therefore the City's calculation of O&M costs is based on the result of its Water Meter Implementation Plan. The Plan compares the difference between manual read and fixed network. It estimates manual read to start at $23.42 per read and ends at $12.95 per read over the 20-year lifetime of the project. Fixed network begins at $26.33 per read and drop to $8.95 over the 20-year period.

d. List the letters of commitment from all cost-sharing partners included with the application

The source of the non-federal funding will be from water revenue bond proceeds. The debt service expenditures for paying this debt back is funded in the Water Enterprise Fund. See Exhibit 4.

Subcriteria No. 2:

Re reasonableness of Cost

(1) Does the budget identify direct, indirect, environmental, and contingency costs? If not explain why.

The budget includes direct cost for the construction/installation of the water meters, and environmental costs that have been advanced by the City.

Subcriteria No. 3:

(1) State the percentage of non-Federal funding provided

The cost for the residential meter installation is projected at $78,000,000. The requested $5,000,000 represents 6% of total cost.

f. Performance Measure for Quantifying Actual Post-Project Benefits

Identify a performance measure for the project and explain how the measure will be applied to the project

Installation of the residential water meters will enable the City to track water consumption. Meetering is one of the Best Management Practices known to improve water use efficiency and increase water conservation potential. It is anticipated that consumers will save 10% of water usage, therefore, as a result of this project, the City of Fresno will save 16,500 Acre Feet in one year. 110,000 residents currently consumes 165,798 acre feet annually, minus 16,500 Acre Feet saved will reduce the demand to 149,298 acre feet yearly.

The water meter technology will detect continuous flow, or lack of flow which will allow the City to identify if there is a leak or if the meter has been tampered. This information will help the resident identify the source of the leak so that repairs can be made. Also to encourage water savings, the City will continue to offer incentives such as rebates for water saving devices.

g. Description of Potential Environmental Impacts

(1) Will the project impact the surrounding environment, soil, dust, air, water quality and quantity

Construction of the proposed project will occur within existing residential properties that are completely developed. During the construction activities, areas of bare soil would be temporarily exposed to erosive forces for a maximum of 2.5 hours. Installation activities would be temporary and short-term and are not likely to result in substantial soil erosion or loss of topsoil. The project sites will be restored to their original condition immediately following completion of meter installation. Therefore, no impact will occur and no mitigation will be required.

(2) Are you aware of any endangered or threatened species in the project area?

Construction of the proposed project will occur within existing residential properties, which are completely developed and highly disturbed from their natural state. This project does not have the potential to degrade the quality of the environment. Implementation of this project will not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the

range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

This project will not impact any areas with native or relatively undisturbed vegetation. Due to the high level of existing disturbance and the lack of habitat for regionally-occurring special-status species at the existing residential properties, special-status species are not expected to occur. Therefore, no impact will occur and no mitigation will be required.

(3) **Are there wetlands inside the project boundaries?**

There are no wetlands inside the project boundaries.

(4) When was the water delivery system constructed

Fresno's original water delivery system was constructed in 1876.

(5) Will the project result in any modification of or effects to, individual features of an irrigation system (e.g. headgates, canals, or flumes) ?

The proposed project will not result in any modifications to individual features of any irrigation system.

(6) Are any buildings structures or features in the irrigation district listed or eligible for listing on the National Register of Historic Places?

No. None of the buildings structures or features in the irrigation district is listed or eligible for listing on the National Register of Historic Places.

(7) Are there any known archeological sites in the proposed project area?

No. There are not any known archeological sites in the proposed project area.

h. <u>Required Permits or Approvals</u>

State whether any permits or approvals are required and explain the plan for obtaining such permits or approvals

Construction of the proposed project will occur within existing residential properties and the City does not anticipate any permits or approvals being required. The City has obtained Council's approval to proceed with this project.

i. Funding Plan and Letter of Commitment

(1) How the applicant will make their contribution to the cost-share requirement

The source of the non-federal funding will be from water revenue bond proceeds. The debt service expenditures for paying this debt back is funded in the Water Enterprise Fund. See Exhibit 4.

(2) Describe any in-kind costs incurred before the anticipated project start date that the applicant seeks to include as project costs

The following costs associated with this project have been paid for by the City of Fresno:

$22,909 for the Initial Study/Negative Declaration

(3) Provide the identity and amount of funding to be provided by funding partners, as well as the required letters of commitment

The source of the non-federal funding will be from water revenue bond proceeds. The debt service expenditures for paying this debt back is funded in the Water Enterprise Fund. See Exhibit 4.

(4) **If the request for Fed funding is greater than $5,000,000 discuss what lesser amount would be acceptable if Reclamations is unable to provide the total funding request**.

The requested amount is $5,000,000, however, the City is willing to accept any amount provided by Reclamation.

(5) **Describe any funding requested or received from other Federal partners**.

None

(6) Describe any pending funding requests that have not yet been approved, and explain how the project will be affected if such funding is denied.

The source of the non-federal funding will be from water revenue bond proceeds. The debt service expenditures for paying this debt back is funded in the Water Enterprise Fund. See Exhibit 4.

j. Official Resolution

The City of Fresno official resolution is attached. See Exhibit 5.

k. Budget Proposal

BUDGET PROPOSAL FORMAT

BUDGET ITEM DESCRIPTION	COMPUTATION		RECIPIENT FUNDING	RECLAMATION FUNDING	TOTAL COST
	$/Unit and Unit	Quantity			
Construction Meter purchase	272/ea	110,000	$29,920,000	$0	$29,920,000
CONTRACTUAL/[2] CONSTRUCTION					
Meter boxes and installation	208.90/ea	110000	22,000,000	980,000	22,980,000
Meters installation	141.77/ea	110000	12,095,291	3,500,000	15,595,291
ENVIRONMENTAL AND REGULATORY COMPLIANCE[3]	22,709	1	22,709	0	22,709
Legal and Administrative	100,000		80,000	20,000	100,000
Reporting			40,000	20,000	60,000
Project Inspection Fees			8,520,000	480,000	9,000,000
Architectural and Engineering	322,000		322,000	0	322,000
TOTAL DIRECT COSTS			**$**	**$**	**$**
INDIRECT COSTS - 1__%					
TOTAL PROJECT COSTS			**$73,000,000**	**$5,000,000**	**$78,000,000**

Budget Narrative

The City of Fresno is requesting $5,000,000 from USBR Water America program to leverage the cost of installing 110,000 water meters. The City is mandated to install 110,000 water meters for a total cost of $78 million, to all its residential services by January, 2013.

Construction- Meter purchase: The estimated cost per unit is $272 for a total of $29,920,000.
Construction and installation of the meter boxes are estimated at $208.90 each for a total estimated at $22,980,000.
Installation of the AMR meters in the meter boxes including electronic connections is estimated at $141.77 each for a total of $15,595,291.

Environmental: Being that there was no substantial evidence in the initial study, a full environmental impact review was not necessary and the City prepared a Negative

[2] Construction and contracts should be broken out into specific line items. Lump sum estimates will not be allowed.
[3] Environmental and regulatory compliance should be at least 2% unless a justification is provided for something less.

Declaration at a cost of $22,709.

Legal and Administrative fee: These funds will be used for the administration of the project.

Reporting: The funds will be used to prepare reporting to be submitted to the USBR in compliance with the grant proposal. Included in the $60,000 under Miscellaneous on the 424-C.

Project Inspection Fee: Will be used to provide the inspection during the installation phase to ensure that construction and equipment meet the standards of the contracted specification.

Architectural and Engineering: The cost to design the plans and specifications for the project.